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INDEX

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ENGINEERING NEWS

FOR THE YEARS

1900 TO 1904 INCLUSIVE

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NEW YORK

THE ENGINEERING NEWS PUBLISHING CO.

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INTRODUCTION.

With the vast increase in the volume of engineering literature that has taken place in the past quarter century has come the necessity for its systematic indexing. On the one hand engineers are more than ever dependent on the published literature of their profession for data on which to base their work in design, construction, and administration—the days when the individual engineer could afford the time to accumulate general data in his own notebook are past. On the other hand, the difficulty of finding information on a particular subject has greatly increased, with the increased bulk of existing literature.

It has long been the aim of the editors of Engineering News, in selecting matter for publication, to consider first of all the direct practical usefulness of the matter to the working engineer. As a result, it is safe to say that a greater proportion of the total issue of Engineering News is bound and permanently preserved for reference than is the case with any other American engineering journal. To make the information in these volumes conveniently accessible, however, there is needed, besides the semi-annual indexes to the separate volumes, a general index which will enable the engineer to find at once all the matter published on a particular subject during a series of years.

The present publication, indexing the ten volumes of Engineering News issued from January 1, 1900, to January 1, 1905, is the third such general index to this journal which has been issued. The first one covered the 16 years from the foundation of the journal in 1874 to the end of 1890. The second, a much larger and more systematically compiled volume, covered the years from 1890 to 1899, inclusive; and the present, as just stated, covers the matter published in the five years following.

As a slight indication of the growth of the engineering profession and the corresponding growth of Engineering News, it may be here noted that the first general index, covering the 16 years preceding 1890, was a volume of 118 pages; the second book, covering the decade preceding 1900, contained 324 pages, and the present volume, covering only half a decade, contains 291 pages. In part, however, the increase in size is due to more careful and complete indexing; and users of the present volume will, we are sure, find it an improvement over its predecessor issued five years ago.

HOW TO USE THE INDEX.

It sometimes happens that the searcher after information will take up the index and turn at once to the subject he desires to find; but quite as often it happens that he will have to look in several places before finding the particular heading under which the indexer has placed it; and oftentimes a persevering search is necessary to find it. For instance, some two years ago there was published an account of the partial failure of a reinforced concrete building at Corning, N. Y. Suppose someone desires to refer to this article, and looks for it under the various headings, "Accidents," "Corning," "Concrete," "Reinforced concrete," "Concrete steel."

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He will find it under none of these headings, but will find it under "Buildings: Failures." On the other hand, suppose the searcher does not know of this particular article, but is merely looking for general information on reinforced concrete. If he looks only at the references under that specific head, he will have only a very small part of the information on that subject which has been published in this journal during the past five years. Under "Buildings," "Dams," "Bridges," "Floors," and numerous other heads will be found information quite as valuable as that under the particular heading of "Reinforced concrete."

Because many engineers are inexperienced in the use of indexes, we have thought it worth while to print here the following suggestions which may be of aid to the searcher after information, either in the present index or in any engineering index compiled with intelligence and systematic method.

1. Form a definite, concrete idea of what it is desired to find.

2. Form an opinion as to the most probable heading or headings under which the indexer has entered the desired information, and write these headings down. Then look in the index for the most probable heading, afterward for the next probable, and so on, paying due heed to cross-references.

3. Look usually for a noun, and seldom for an adjective; for example, articles on difficult shaft-sinking are indexed under "Shaft-sinking," and not under "Difficult."

4. Look for a general rather than a specific name; for example, look for articles on the Brooklyn Bridge under "Bridges," not under "Brooklyn"; articles on the Chicago Main Drainage Channel under "Canals" or "Sewers," not under "Chicago," or "Drainage"; articles on Hall signals are under "Signals and signaling," not under "Hall," or "Banjo," or "Disk." But the common name taken as a key-word should be a specific technical name, rather than the name which a layman might use.

5. If the desired items are not found under the headings that seem unquestionably appropriate, it is likely either that special reasons led the indexer to use grouping and group-indexing for the topic, or else that the item or items sought for had as their main subject something other than the topic in which the searcher is interested.

6. Questions as to the classification or grouping which may conceal items on a given topic may often be resolved, when no assistance is obtained from alternative reference or cross-reference, by looking up a related topic which is more important, and therefore more likely to have separate entry or more likely to be revealed in cross-references. Thus, when no entry is found under "Contact beds," and no more likely heading occurs to the searcher, he may obtain assistance by looking under "Filters," where is given the cross-reference "(See also Feed-water filters; Sewage purification; Water purification)," indicating that all items relating to sewage treatment (hence also contact beds) are grouped under the heading "Sewage purification."

7. The case where the topic in which the searcher is interested does not form one of the leading subjects of the corresponding items and articles, so that this topic cannot yield suitable key-words for the search, is very

frequent. It is then necessary to refer to all topics whose individual items may contain something on the subject in question, and often it is necessary to locate, look up, and read a great mass of items and articles, in order to sift out the bits of information concerning the particular topic in hand. This cannot be avoided, it is inherent in bibliographic research, and can in no wise be charged against the index.

8. The case where a topic upon which search is made is concerned in several entry-headings besides the main or natural one is also of frequent occurrence. Thus, if research be made on the subject of Retaining-wall theory, it is not sufficient to look only under the heading "Retaining-walls," but a number of other actual or possible headings should be referred to, as "Embankments," "Earthwork," "Grain elevators," "Bins," etc. Intelligence and perseverance are essential for success in such cases. Cross-references have been liberally used to aid the searcher; but it is impossible, of course, to insert cross-references on every possible heading that might be thought of.

9. There are some few cases of parallel, closely related subjects, which yet must all be used in the index. The subjects, "Streets," "Roads," "Pavements," are a good example of this. Much of what a searcher under any one of these heads would require to find would probably be entered under one or the other of the remaining headings. The distinction made by the indexer is not necessarily the same as that made by the searcher. Again, an article relating quite specifically to "Pavements," and therefore properly entered under that heading, may in part be applicable to roads, and may be as important to the searcher for information on "Roads" as many of the articles entered under the latter heading.

10. It sometimes happens that a searcher wishes to find a particular article written by a certain engineer. In such a case the quickest plan is to refer to the separate "Author Index," placed at the end of the volume, which is a new feature not included in any of our previous general indexes.

11. The matter contained in the weekly "Construction News Supplement" is not included in the present index, with the exception that from the beginning of 1903 to the middle of 1904 certain editorials and letters of especial interest to contractors were printed here instead of in the body of the paper. These articles are indexed in this book; but in referring to them it should be borne in mind that the Construction News Supplement is paged separately from the rest of the paper.

12. The monthly "Engineering Literature Supplement" which has formed a part of Engineering News for the past three years is only partially indexed in the present volume. This Supplement was also separately paged up to July 1, 1904, since which date the pages have been numbered in with the other reading matter pages.

In conclusion a word may be permissible, particularly to the younger generation of engineers, on the value of Engineering News as a work of reference, and the importance of preserving and binding the issues for this purpose. Read the paper, week by week, as much as time and opportunity permit, to keep yourself abreast of current progress and events in

the profession. Used in this way, the paper has a large educational value. But in these busy days it often happens that an engineer will find little or no time to keep up with professional literature. The time that he needs it most is when a practical problem confronts him and he wishes to know what others have done under similar conditions; and what data exist that will enable him to work intelligently and with a safe reliance on past precedent. Under such circumstances, Engineering News is the engineer's indispensable tool, and the present volume is designed to be a labor-saving aid in its use.

THE EDITORS OF ENGINEERING NEWS.

220 Broadway, New York, November, 1905.



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